

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Previously Presented): A method of making a catalyst comprising the steps of:

- mixing
 - 1) an alcohol;
 - 2) a titanium alkoxide; and
 - 3) a binder
- in the presence of a catalytic acid to form a first mixture
- heating the first mixture at a temperature at least equal to 100°C for at least 2 hours to form a second mixture; and
- calcinating the second mixture at a temperature of at least equal to 450 °C for at least 2 hours.

Claim 2 (Original): The method of Claim 1, wherein the alcohol is selected from the group consisting of isopropanol and ethanol.

Claim 3 (Original): The method of Claim 1, wherein the titanium alkoxide is selected from the group consisting of titanium isopropoxide and titanium butoxide.

Claim 4 (Original): The method of Claim 1, wherein the binder is selected from the group consisting of polyethylene 200, polyethylene 400, polyethylene 600 and a mixture of tetraethoxysilane and water.

Claim 5 (Original): The method of Claim 1, wherein the ratio of alcohol : titanium alkoxide : binder is about 1:12:10 to 1:20:10.

Claim 6 (Previously Presented): The method of Claim 1, wherein said catalytic acid is selected from the group consisting of concentrated hydrochloric acid and concentrated nitric acid.

Claim 7 (Original): The method of Claim 1, wherein the catalytic acid is in an amount of 1.3 to 3.6 weight percent with respect to the titanium alkoxide.

Claim 8 (Previously Presented): A catalyst manufactured by the method of Claim 1.

Claim 9 (Previously Presented): A catalyst manufactured by the method of Claim 2.

Claim 10 (Previously Presented): A catalyst manufactured by the method of Claim 3.

Claim 11 (Previously Presented): A catalyst manufactured by the method of Claim 4.

Claim 12 (Previously Presented): A catalyst manufactured by the method of Claim 5.

Claim 13 (Previously Presented): A catalyst manufactured by the method of Claim 6.

Claim 14 (Previously Presented): A catalyst manufactured by the method of Claim 7.

Claim 15 (New): The method of claim 1, wherein the heating and calcinating steps are effective to form titanium dioxide in crystalline phase.